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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,507	01/31/2000	Yoshimi Baba	CS-02-000131	3553

22712 7590 01/14/2005

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EXAMINER	
ADAMS, JONATHAN R	

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/494,507	BABA, YOSHIMI	
	Examiner	Art Unit	
	Jonathan R Adams	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13, 17, 18, 20, 21, 23, 24, 28, and 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 14, 15, 16, 19, 22, and 25-27 have been canceled.

Claims 1 and 6-12 have been amended to incorporate limitations of canceled claims.

Response to Arguments

1. Applicant's arguments filed 7/14/04 have been fully considered but they are not persuasive.

2. In response to applicant's argument that Escamilla does not teach storing IP packets that have passed through a gateway. Escamilla teaches: "Network traffic is usually obtained (stored) by activating a network adapter in promiscuous mode" (Page 174, Escamilla). Escamilla further teaches for network packet-based IDSs to filter through data including Firewall logs (Page 308, Escamilla), and more specifically teaches combination gateway/firewall/IDS implementations (Page 194, Escamilla).

3. Further, the definition of IDS is: "A type of security management system for computers and networks that gathers and analyzes information from various areas within a computer or a network to identify possibly security breaches, both inside and outside the organization. An IDS can detect a wide range of hostile attack signatures, generate alarms, and, in some cases, cause routers to terminate communications from hostile sources". Microsoft Computer Dictionary.

4. In response to applicant's arguments that the combined references of Escamilla and Cheswick do not teach closing the gateway to malicious IP packets only for a

predetermined amount of time. The combination of references teaches blocking communication by firewall from an IDS detection. As broadly as stated in the claims, the predetermined period of time could constitute an open-ended interval, as there is no mention in the claims that the gateway should be reopened after the period has ended.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 1-13, 17, 18, 20, 21, 23, 24, 28, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over "Intrusion Detection" by Terry Escamilla (hereafter referred to as "Intrusion") in view of Cheswick.

7. As to claim(s) 1, 4, 17, 20, and 23:

Intrusion teaches a system for monitoring a network based on IP comprising:

- Attack detection means / Intrusion Detection
- Acquiring/Storing IP Packets / Network traffic is usually obtained by... (Page 174, "Data Source", Line 2 et seq., Intrusion)
- Monitoring the stored IP packets / Network packet-based IDSs filter ... (Page 308, "Discovery and Detection", Line 4 et seq., Intrusion)

- Processing means... / Processing means is a requisite inherent to all computer based systems
- Effecting a predetermined process / Custom responses can be designated for each event of interest (Page 308, "Discovery and Detection", Line 15 et seq., Intrusion)
- Holding an algorithm for detecting / Intrusion Detection code (Page 194, Line 10 et seq., Intrusion)
- Generating a report output / IDS prints reports ... (Page 308, "Discovery and Detection", Line 21 et seq., Intrusion)

8. The examiner takes official notice of both the motive and modification necessary to reject packets based on the IP packet characteristics detected by the IDS.

9. Intrusion teaches the use of coupling an intrusion detection system with a firewall (Page 194, Line 5 et seq., Intrusion) in a system for monitoring and detecting general types of cracker attacks based on their known patterns and characteristics in a network based on IP. Intrusion does not explicitly teach the means for rejecting IP packets based on the IP header characteristics associated with the well-known specific attacks listed in claims. It would have been obvious to a person of ordinary skill in the art at the time of invention to reject packets based on the IP packet characteristics detected by the IDS. One of ordinary skill in the art would have been motivated to reject packets in this manor because rejecting packets based on IP characteristics is well known in the art as a method by which packet filtering firewalls provide protection.

As to dependent claims 2 and 3:

Although Intrusion teaches receiving IP packets, it does not explicitly teach receiving all IP packets. However, this feature is inherent to all intrusion detection systems and is necessary to perform the functions they carry out.

Receiving only IP packets / As broadly as stated, the invention as disclosed in Intrusion implemented in a network based solely on Internet Protocol would receive only IP packets.

As to claim(s) 5:

10. Intrusion teaches the use of coupling an intrusion detection system with a firewall (Page 194, Line 5 et seq., Intrusion) in a system for monitoring and detecting crackers in a network based on IP. Intrusion also teaches the classification of network data in pattern matching detection including general regular expressions (Page 170, Line 17 et seq., Intrusion). Intrusion does not explicitly teach classifying the acquired IP packets by source/destination IP. Cheswick teaches the classification of IP packets by source/destination IP as a general regular expression packet-filtering rule (Section 3.3, Line 5 et seq., Cheswick). It would have been obvious to a person of ordinary skill in the art at the time of invention to include the classification by source/destination as a general regular expression for use in the coupled IDS/Firewall system. One of ordinary skill in the art would have been motivated to include the classification by source/destination because such a classification is notoriously well known in the art as a packet-filtering rule to prevent many known forms of attacks.

As to claim(s) 6-12:

11. The examiner takes official notice of both the motive and modification necessary to use the various patterns and characteristics listed in claims 6-12 as a means for detecting their associated attacks within the IDS/Firewall combination disclosed in Intrusion.

12. Intrusion teaches the use of coupling an intrusion detection system with a firewall (Page 194, Line 5 et seq., Intrusion) in a system for monitoring and detecting general types of cracker attacks based on their known patterns and characteristics in a network based on IP. Intrusion also discloses a means for detecting attacks known as "syn-flood" (Page 267, Line 6 et seq., Intrusion), "Fragmented IP Packets" (Page 268, Intrusion), and "Brute force" (Page 172, Line 23 et seq., Intrusion). Intrusion does not explicitly teach the patterns and characteristics by which the abovementioned attacks are detecting, nor does it teach the other attack methods listed in the claims or their associated patterns and characteristics. It would have been obvious to a person of ordinary skill in the art at the time of invention to use the various patterns and characteristics listed in the claims as a means to detect their well known associated attacks. One of ordinary skill in the art would have been motivated to use these various patterns and characteristics as a means for detecting their associated attacks because attacks are defined by the characteristics they entail, and therefor must be detected in this manor.

As to claim(s) 18, 21, 24:

13. The examiner takes official notice of both the motive and modification necessary to filter packets from the source of the attack for a longer period of time than packets to the attack destination.

14. Intrusion teaches the use of coupling an intrusion detection system with a firewall (Page 194, Line 5 et seq., Intrusion) in a system for filtering IP packets associated with an attack. Intrusion does not explicitly teach to filter packets from the source of the attack for a longer period of time than packets to the attack destination. It would have been obvious to a person of ordinary skill in the art at the time of invention to filter packets from the source of the attack for a longer period of time than packets to the attack destination. One of ordinary skill in the art would have been motivated to filter packets from the source of the attack for a longer period of time than packets to the attack destination because it is obviously beneficial for the attack destination being protected by the network monitoring system to return to packet receiving status immediately after the period of time characteristic to a certain type of attack. Similarly, it is obviously beneficial to reject packets as long as possible from the source of an attack, or until other action can be taken.

15. As to claim(s) 28, it recites concomitance elements of previously rejected claims and therefor fail to distinguish over them accordingly. See above for the specifics of the rejection.

16. As to claim(s) 29, it further recites:

Further comprising a packet filter / filtering capabilities to received packets (Page 194, Line 5 et seq., Intrusion)

.Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

18. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan R Adams whose telephone number is (703)

305-8894. The examiner can normally be reached on Monday – Friday from 10am to 6pm.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

GREGORY MORSE
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